

31. New Indian Drilid Beetles. By S. MAULIK, F.Z.S.,  
Professor of Zoology in the University of Calcutta.

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(Text-figures 1-5.)

In the present paper four beetles from India of the Family Drilidæ are described. They are all characterized by the possession of extraordinarily developed lamellate terminal joints of both the maxillary and labial palpi. These joints, of both pairs of palpi, are similar in structure, and are of almost equal size. They naturally fall into two genera, and can be distinguished thus:—

- |   |                                  |
|---|----------------------------------|
| Head almost as long as the pronotum, so that the eyes are distant from the front edge of the pronotum.      |                                  |
| Antennæ distant .....   | <i>Lamellipalpus</i> , gen. n.   |
| Head short, the eyes almost touching the front edge of the pronotum. Antennæ more or less approximate ..... | <i>Lamellipalposes</i> , gen. n. |

LAMELLIPALPUS, gen. n.

The type of this genus is *Eugeusis nigripennis* Pascoe, from Burma. At the end of his description of this insect (Ann. Mag. Nat. Hist. xx. 1887, p. 10, t. i. f. 7) the author remarks: "The description is from a female; the male has probably flabellate antennæ, as in *E. palpator* Westwood" (the type of the genus *Eugeusis*). I have examined Pascoe's type; it is not a female, therefore his conclusion that the male has flabellate antennæ is not correct. Under this assumption he included his *nigripennis* in Westwood's genus *Eugeusis*, of which I have seen a specimen in the collection of the British Museum, and with which it is not congeneric. It is necessary, therefore, to erect a new genus for the reception of this species as well as two others in the collection of the British Museum.

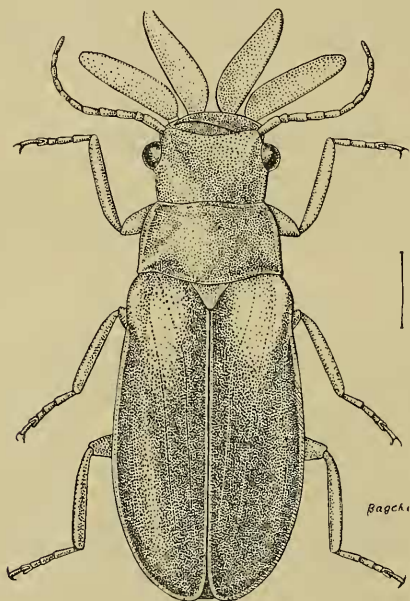
*Generic characters.*—The antennæ are 11-jointed, filiform; sometimes each joint is slightly expanded on the inner side. They are separated from each other by the whole breadth of the head, and are situated in front of the eyes. The eyes are convex and prominent. The mandibles are large, curved, and pointed; in repose they lie crossed. The maxillary and labial palpi are 4- and 3-jointed respectively, the terminal joint in each being very large, elongate, and compressed. The front coxæ are large and exerted, having a large trochanter; the intermediate and hind coxæ are contiguous, but not so large as the front ones. The tarsi are 5-jointed, the fourth being bilobed. The elytra are not of a membranous texture and the suture is closely fitting.

## LAMELLIPALPUS NIGRIPENNIS Pascoe.

The following description and illustrations are from a fresh specimen taken by Mrs. Kemp in Assam :—

Colour testaceous brown; underside paler; elytra blackish, except an ill-defined basal area, the suture and the lateral margins; the antennæ except the two basal joints blackish; eyes deep black. The upper side of the head and prothorax is shining, the rest of the body being subnitid. The whole body of the insect is covered with fine brown pubescence.

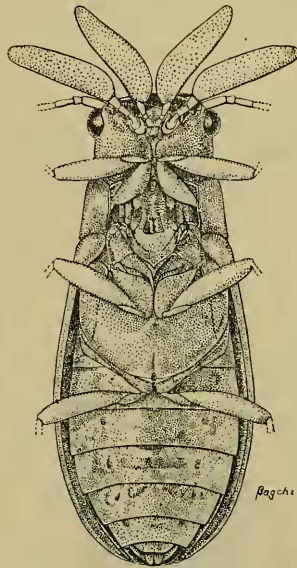
Text-figure 1.

*Lamellipalpus nigripennis* Pascoe.

*Head* almost as broad as long, slightly narrowed towards the neck, shallowly depressed in front; upper surface smooth, shining, sparsely covered with fine brown hairs. Viewed from above, the extraordinarily developed terminal joints of the palpi and the large mandibles are conspicuous. The joints of the antennæ are not at all expanded on the inner side. *Pronotum* broader than long, front margin straight, lateral and posterior margins slightly sinuate, anterior lateral angles rounded, posterior ones very acute. The upper surface is gently convex, shining, covered with fine brown pubescence, more so on the sides than on the middle area, deeply depressed at the base on either side of the longi-

tudinal middle line. *Elytra* as broad at the base as the prothorax; the humeral angles are rounded. Corresponding to the basal depressions of the pronotum, the opposite elytral areas at the base are also depressed. The surface is punctate, covered with brown pubescence. Each elytron has four feeble costæ, the two inner ones—*i. e.*, those nearer the suture—being more prominent than the outer ones; the two inner ones commence at the base and terminate before reaching the apex; the third, commencing posterior to the humerus, terminates about the middle; the fourth, commencing below the humerus, terminates

Text-figure 2.

Underside of *Lamellipalpus nigripennis* Pascoe.

just beyond the middle. Of the four costæ the third is the feeblest; to a certain extent they converge towards the apex. *Scutellum* triangular, light brown, pubescent, impunctate, subnitid. *Underside* brown, but lighter than the colour of the upperside; the abdominal segments have a slight suffusion of black. The surface is sparsely covered with fine brown hairs, their roots give the surface an appearance of being finely punctate. The abdominal segments are at a lower level than the metathoracic segment; each is convex in the middle and depressed at the sides, these lateral depressions forming an oblique line on either side. The underside of the femora and tibiæ is not sulcate.

Length 10 mm., breadth  $4\frac{1}{2}$  mm. Length of head 2 mm.,

breadth of head across the eyes 3 mm., without the eyes  $2\frac{1}{2}$  mm. Length of pronotum  $2\frac{1}{2}$  mm.

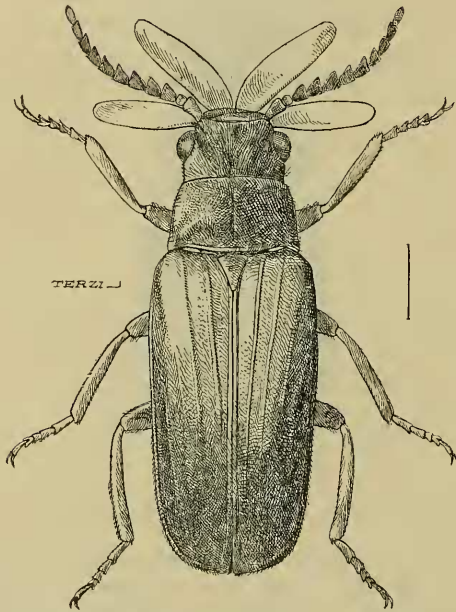
Assam, Garo Hills; Tura, 1400 ft.; Oct. 1917 (*Mrs. Kemp*) (Indian Museum).

The type specimen (Brit. Mus.) is from Burma. The brown parts in the type are lighter than *Mrs. Kemp's* specimen; also in the type the lighter colour of the suture and the lateral margins of the elytra is not so well marked.

LAMELLIPALPUS BOMBAYENSIS, sp. n.

Upperside shining, dark brown, in one specimen of the two lighter brown; the antennal joints from the third joint to apex

Text-figure 3.



*Lamellipalpus bombayensis* Maulik.

brownish-black, and the apical area of the elytra obliquely continuing to the middle along the side smoky black; eyes deep black. Underside shining light to dark brown. The whole insect, both on the upper and lower sides, is covered with light brown pubescence.

*Head* almost as long as broad, depressed in the middle in front but convex round the roots of the antennæ; surface punctate, each puncture having a stiff hair. The eyes strongly convex.

The first joint of the antennæ club-shaped, the second very short, the third to the tenth almost equal in size and slightly expanded triangularly towards the inner side, the last joint bluntly rounded. In the expanded character of the several joints of the antennæ it bears a certain amount of resemblance to *Eugeusis palpator* Westwood, in which these points are extraordinarily expanded into rami. *Prothorax* about as broad as long, slightly narrowed towards the front; the posterior lateral angles produced to acute points; surface convex, with a faint longitudinal impression along the centre and deeply sloped on each side; this, with a similar slope on the elytra in front of the humerus, forms a deep depression; closely punctate. *Scutellum* triangular, punctate. *Elytra* as broad at the base as the prothorax. The lateral margins and suture costate. On each elytron there are three more or less prominent costæ; one runs close to the suture, the second along the longitudinal middle line, and the one nearer the margin starts from a point below the humerus, a feeble one, corresponding to the third in *Lamellipalpus nigripennis* Pascoe, is observable in certain lights. These costæ approach one another towards the apical area, where they disappear. The surface is irregularly punctate. *Underside* shining, smoother than the upperside.

Length 9-10 mm.

Bombay.

Described from two examples, the larger of which I have made the type specimen. It has the apical black patch on the elytra diffused, while in the other it is more sharply defined. In the type specimen the lamellate joints of the palpi are broader, with apex slightly narrowed, while in the smaller specimen they are uniformly narrower.

Type in the British Museum.

#### LAMELLIPALPUS MANIPURENSIS, sp. n.

Upperside subnitid, thorax and head more shining than the elytra; elytra and eyes black, the four lamellate terminal joints of the maxillary and labial palpi, and the antennal joints except a part of the two basal joints, smoky black; the rest of the body, including the underside, brown. The lamellate joints of the palpi are narrower and more elongate in this species than in the two others of this genus.

*Head* almost as broad as long; interantennal space shallowly depressed, covered with light brown pubescence. The first joint of the antennæ is almost as long as the third joint but very slightly thicker, second joint small and rounded, third joint slightly club-shaped, fourth to tenth almost equal to each other in length and thickness, the eleventh slightly longer than each of the preceding ones and rounded at the extremity; the joints of the antennæ are not at all expanded. *Prothorax* slightly broader than long, sides and front margin straight, basal margin sinuate; the

posterior exterior angles acutely produced, the extreme edges of the produced part sharply depressed. The pronotum is covered with light brown erect pubescence. *Scutellum* brown, triangular, covered with light brown pubescence. *Elytra* almost as broad at the base as the prothorax. The surface is confusedly punctate and covered with light brown pubescence. The three costæ on each elytron are very feeble though distinctly recognizable. *Underside*: the elytra project to a certain extent beyond the abdomen, shining, covered with stiff brown hairs.

Length 7.5 mm.

Manipur (*Doherty*).

Described from one example.

Type in the British Museum.

#### LAMELLIPALPODES, gen. n.

The genus differs from *Lamellipalpus* in the length of the head and in the approximation of the antennæ, as has been indicated in the key given above. The type of the genus is the following species.

Although I include the two new genera described here in the family Drilidæ, I am not sure about the position of *Lamellipalpus*, gen. n. When I examined *Lamellipalpus nigripennis* Pascoe (Garo Hills, *Mrs. Kemp*) and *Lamellipalpus annandalei* Maulik at Calcutta, I was impressed by the fact that they both possessed the remarkable lamellate palpal joints but did not appear to belong to the same family. Dr. C. J. Gahan thinks that *Lamellipalpus* Maulik does not belong to the Drilidæ, but is more allied to the Rhagophthalmidæ, a neighbouring family of about three genera, including nine species. Without further research it is not possible to decide this point.

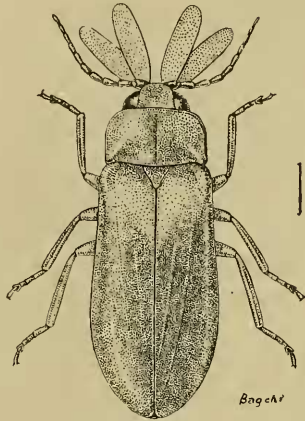
#### LAMELLIPALPODES ANNANDALEI, sp. n.

Upperside yellow-brown, underside lighter; antennæ except the two basal joints, and the elytra except an ill-defined basal portion (which shares the colour of the pronotum) smoky black. Eyes deep black. The whole body is covered with brownish pubescence.

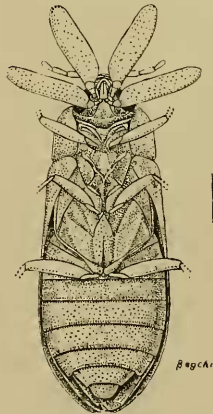
*Head* narrower than prothorax, the interocular space piceous. The first joint of antennæ stout and large, second joint very small and rounded, the third to the tenth similar in structure but of gradually diminishing length, the eleventh bluntly rounded. *Prothorax* broader than long, with a longitudinal median sulcation; posterior angles acute, pointed, anterior ones rounded; basal area depressed on either side of the middle longitudinal line, basal margin bisinuate. *Scutellum* triangular, with the apex rounded, brown, smooth. *Elytra* as broad at the base as the prothorax. Corresponding to the prothoracic depressions, the elytra are also depressed at the base. The surface neither

smooth nor regularly punctate-striate. Each elytron is feebly tricostate; the costæ are more visible if the insect is held at certain angles; the first—that which is nearest to the suture—proceeds from the apex of the basal declivity of the elytra, the

Text-figure 4.

*Lamellipalodes annandelei* Maulik.

Text-figure 5.

Underside of *Lamellipalodes annandelei* Maulik.

second commences from the edge of the elytral black area, the next commences about the middle of the elytron, each of these terminating on the apical area of the elytron.

Length  $5\frac{3}{4}$  mm.

- Described from five examples.
- Type in the British Museum.
- Cotype in the Indian Museum.

Of the five examples four belong to the British Museum, and these have only "Bengal" on the locality labels; the specimen belonging to the Indian Museum was taken by Dr. N. Annandale from the following locality:—

Barkuda Island, Chilka Lake, Ganjam district, Madras Presidency, 22. vii. 1920; found on bath-room window.

In this specimen the costæ of the elytra are more pronounced.

In preparing this paper I have had the advantage of seeing specimens in the British Museum collection. I wish to thank Dr. C. J. Gahan and Mr. K. G. Blair for their courtesy, valuable suggestions, and criticisms. I wish to thank also Dr. N. Annandale and Dr. and Mrs. Kemp for kindly letting me examine their respective insects. The drawings of two insects were made by Mr. S. C. Bagchi, of the Indian Museum, Calcutta, and of one by Mr. A. J. E. Terzi; to these artists my thanks are also due.

The preliminary study of these interesting beetles was made in the Indian Museum, Calcutta, while I held charge of its Entomological Section.